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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,845

Applicant(s)

CHOI ET AL.

Examiner

TANGELA T. CHAMBERS

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-15, 18-25 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-15, 18-25 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment and arguments filed on 7/14/2008.
2. Claims 13, 18-20, 25 and 30 have been amended.
3. Claims 1-12, 16-17 and 26-28 have been cancelled.
4. Claims 13-15, 18-25 and 29-31 are rejected.

Claim Objections

5. **The claims are objected to because of the following informalities:**

Claim 1 appears to be missing the word "providers" in the phrase "and re-requesting at least a portion of the plurality of service to indicate a new value of the selection parameter".

Appropriate correction is required.

Response to the Arguments

6. The applicant's arguments filed on 7/14/2008 have been fully considered, but they are not persuasive. In the Remarks, the applicant has argued in substance:

(1) The applicant argued features, i.e., a computerized device for selecting a service provider from a plurality of service providers for a radio communication service received by a mobile station. Said mobile station receives a request to select a provider, transmits a request indicating a value of a selection parameter to the plurality of service providers, compares the values received from the service providers, re-requests service providers to indicate a new value of the selection parameter, and in the event two or more providers have an identical value, randomly selecting a provider.

Response:

- (1) The argued features read upon Engelhart in view of Spear.

Engelhart discusses a mobile device selecting a telecom provider in a radio access network. Thus, Engelhart shows the limitation of "selecting a provider that

provides a radio communication service that can be received by a mobile station via a radio access network".

Engelhart discusses a plurality of telecom providers. Thus Engelhart shows the limitation of a service that is provided by "a plurality of service providers".

Engelhart discusses the mobile device communicating a query to service nodes in order to determine the most favorable service provider. Thus Engelhart shows the limitation of "receiving from a mobile station via a radio interface of the radio access network a request to select a provider for the service from the plurality of service providers by a selecting device".

Engelhart discusses the query of the mobile device containing a request for capabilities and costs. Thus Engelhart shows the limitation of "requesting the plurality of service providers to indicate a value of a selection parameter by the selecting device".

Engelhart discusses the mobile device receiving a response containing cost and capability information of the service provider. Thus Engelhart shows the limitation of "receiving a response having an indicated value from each of the plurality of service providers".

Engelhart discusses selecting a provider based on the capability and cost information received at the mobile device from the service providers. Thus Engelhart shows the limitation of "selecting a provider from the plurality of service providers based on the indicated value from each response".

Engelhart discusses the mobile device periodically requesting and receiving values from service providers. Thus Engelhart shows the limitation of "the plurality of service providers indicating respective values within a first time interval".

Engelhart discusses selecting a provider after receiving updated value information after a period of time. Thus Engelhart shows the limitation of "selecting of the provider occurring after a second time interval".

Engelhart discusses a mobile device selecting a service provider based on access, quality and service from a list it is provided. Thus Engelhart shows the

limitation of "comparing the values received with each other to perform an initial selecting of a provider based on a most favorable value from the values received".

Engelhart discusses the mobile device periodically requesting updated costs and service information from service providers. Thus Engelhart shows the limitation of "re-requesting at least a portion of the plurality of service providers to indicate a new value of the selection parameter".

Engelhart did not discuss selecting of a provider on a random basis in the event two or more providers have identical values; therefore Engelhart was modified with Spear to show such features were obvious in the art.

As a result, the argued features were shown by Engelhart as modified by Spear.

(2) Regarding the applicant's arguments within the dependencies, Engelhart as discussed above disclosed those limitations, or Engelhart as modified by the secondary references Spear, Allen and Campbell show those limitations.

As a result, the argued features read upon the references as follows:

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-15, 18, 21-25 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engelhart (US Patent Publication No. 2004/0203580 A1), in view of Spear et al (Spear) (US Patent No. 6,853,621 B1).

As per claim 13, Engelhart discloses:

- ***A computerized method for selecting a provider that provides a radio communication service that can be received by a mobile station via a radio access network and is provided by a plurality of service providers via the radio access network,*** (Engelhart, Abstract and Page 2, Paragraph [0023]).
- ***receiving from the mobile station via a radio interface of the radio access network a request to select a provider for the service from the plurality of service providers by a selecting device;*** (Engelhart, Fig. 2 and Page 2, Paragraphs [0023]-[0024]), Engelhart teaches a mobile device requesting services (capabilities) from a plurality of providers via a selecting device (access node).
- ***requesting the plurality of service providers to indicate a value of a selection parameter by the selecting device;*** (Engelhart, Fig. 2 and Page 2, Paragraph [0024], "The access node 102, in turn, communicates to call control nodes 106,108 the queries Q2 and Q3, respectively, for capabilities and costs. The call control node 106 communicates queries Q4 and Q5 to the service nodes 112,114, respectively, for capabilities and costs.").
- ***selecting the provider by the selecting device based on the values received from the indication request,*** (Engelhart, Fig. 5 and Page 3, Paragraph [0033], "With reference to FIG. 5, the device 122 displays the information of response R5 as a list of options 502. The options reflect the capabilities and cost information returned in response to the queries." ... "The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user's preferences and the costs. Alternatively, the user of the device 122 can select a combination of access, quality, and service from the list.").
- ***the plurality of service providers indicating respective values within a first time interval,*** (Engelhart, Page 3, Paragraph [0033], "Further, a user device may periodically request updated costs and services information from the network, without requiring subscriber initiation. Rules may be set-up by a subscriber to request or select specific services according to a rule set."), Engelhart teaches that user defined parameters may be set up in order to periodically receive updated information regarding

service providers, and selecting a provider based on the new information. It is inherent that the user could define how often the information should be updated and when selection should occur.

- ***the selecting of providers occurring after a second time interval***, (Engelhart, Page 3, Paragraph [0033], "Upon finding a better or cheaper network configuration, the user layer device could request subscriber authorization (e.g., on a user device display), or auto-authorize an alternative configuration, based on a subscriber established rule set.").
- ***wherein after the first time interval comparing the values received with each other to perform an initial selecting of a provider based on a most favorable value from the values received***, (Engelhart, Page 3, Paragraph [0033], "The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user's preferences and the costs. Alternatively, the user of the device 122 can select a combination of access, quality, and service from the list.").
- ***re-requesting at least a portion of the plurality of service to indicate a new value of the selection parameter***, (Engelhart, Page 2, Paragraph [0027] and Page 3, Paragraph [0033], "Further, a user device may periodically request updated costs and services information from the network, without requiring subscriber initiation.").

Engelhart does not specifically disclose:

- ***in the event the received new values of at least two providers have an identical value, the selecting by the selecting device is performed on a random basis***, However, Spear in an analogous art discloses the above limitation. (Spear, Column 8, Lines 42-50, "[T]he items with the same rank may be ordered randomly or according to a predefined procedure (default or user-specified).").

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Spear into the teaching of Engelhart to randomly select a provider when at least two have an identical value. The

modification would be obvious because one of ordinary skill in the art would want the benefit of achieving an efficient and easy method to identify which service provider to use for a requested service (Spear, Column 2, Lines 35-44).

As per claim 14, Engelhart further discloses:

- ***the mobile station is informed about the selected provider.*** (Engelhart, Page 3, Paragraphs [0033] and [0037]-[0039], "The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user's preferences and the costs." ... "The device may also display a service provider name for one or more of the potential plural services enumerated on the device display."), Engelhart teaches that the service provider may be automatically selected and that the name of the service provider may be displayed. Therefore, it would be obvious to one of ordinary skill in the art that the invention taught by Engelhart is capable of informing a mobile device via its display of the automatically selected service provider.

As per claim 15, Engelhart further discloses:

- ***the selecting device assigns the mobile station to the selected provider for a connection setup via the radio interface,*** (Engelhart, Page 3, Paragraph [0036]).

As per claim 18, Engelhart further discloses:

- ***the portion of the plurality of service providers are re-requested to indicate the value of a selection parameter within a third time interval.*** (Engelhart, Page 2, Paragraph [0027] and Page 3, Paragraph [0033], "Further, a user device may periodically request updated costs and services information from the network, without requiring subscriber initiation.").

As per claim 21, Engelhart further discloses:

- ***the value from the request is different than the value from the re-request,*** (Engelhart, Page 2, Paragraph [0027] and Page 3, Paragraph [0033], "Rules would be

particularly helpful, for example, in periodic network service requests. Upon finding a better or cheaper network configuration, the user layer device could request subscriber authorization (e.g., on a user device display), or auto-authorize an alternative configuration, based on a subscriber established rule set.”).

As per claim 22, Engelhart further discloses:

- ***the selection parameter is defined by the mobile station***, (Engelhart, Abstract and Page 3, Paragraph [0033], “The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user’s preferences and the costs.”).

As per claims 23 and 24, Engelhart further discloses:

- ***the selection parameter includes a price of the service and quality of service***, (Engelhart, Fig. 5 and Page 3, Paragraph [0033], “The options reflect the capabilities and cost information returned in response to the queries. The options include the type of access available (for example, GPRS or DSL), the quality of service (bits per second, voice only, voice and data), and services available (voice mail, stock quotes, email, web browsing, video), and the cost per minute.”).

As per claim 25, Engelhart discloses:

- ***A computerized selecting device for selecting a provider for a radio communication service that can be received by a mobile station via a radio access network and is provided by a plurality of service providers via the radio access network***, (Engelhart, Abstract and Page 3, Paragraph [0033], “The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user’s preferences and the costs.”).
- ***a receiver capable of receiving a request sent by the mobile station via a radio interface of the radio access network to select a provider for the service***; (Engelhart, Fig. 2 and Page 2, Paragraphs [0024]-[0026], “With reference to FIG. 2, the

device 122 communicates to an access node 102 a query Q1 for capabilities and or costs.”).

- ***a transmitter capable of sending a request to indicate a value of a selection parameter to the plurality of service providers***, (Engelhart, Fig. 2 and Page 2, Paragraphs [0024]-[0026], “The access node 102, in turn, communicates to call control nodes 106,108 the queries Q2 and Q3, respectively, for capabilities and costs.”).
- ***the receiver capable of receiving response having an indicated value from each of the plurality of service providers***; (Engelhart, Fig. 3 and Page 2, Paragraphs [0027]-[0030], “The call control node 108 communicates a response R4 to the access node 102. The response R4 comprises the information of response R1 (the costs and capabilities of the service node 114) as well as the costs and capabilities of the call control node 108.”).
- ***a selector capable of selecting a provider from the plurality of service providers based on the indicated value from each response***. (Engelhart, Fig. 2 and Page 3, Paragraph [0033], “With reference to FIG. 5, the device 122 displays the information of response R5 as a list of options 502. The options reflect the capabilities and cost information returned in response to the queries. The options include the type of access available (for example, GPRS or DSL), the quality of service (bits per second, voice only, voice and data), and services available (voice mail, stock quotes, email, web browsing, video), and the cost per minute.”... “The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user’s preferences and the costs.”).
- ***a first timer that after expiring, the values received are compared with each other, and a most favorable value is determined by the selector from the values received***, (Engelhart, Page 3, Paragraph [0033], “The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user’s preferences and the costs. Alternatively, the user of the device 122 can select a combination of access, quality, and service from the list.”).
- ***wherein the selector is configured to perform an initial selection of a provider based on the most favorable value determined from the values received***,

(Engelhart, Fig. 5 and Page 3, Paragraph [0033], "With reference to FIG. 5, the device 122 displays the information of response R5 as a list of options 502. The options reflect the capabilities and cost information returned in response to the queries." ... "The device 122 may be configured to automatically select a combination of access, quality, and service based upon the device user's preferences and the costs. Alternatively, the user of the device 122 can select a combination of access, quality, and service from the list.").

- ***wherein the selector is further configured to re-request at least a portion of the plurality of service providers to indicate a new value of the selection parameter,*** (Engelhart, Page 2, Paragraph [0027] and Page 3, Paragraph [0033], "Further, a user device may periodically request updated costs and services information from the network, without requiring subscriber initiation.").

Engelhart does not specifically disclose:

- ***in the event the received new values of at least two providers have identical values, the selector is configured to select a provider on a random basis,***
However, Spear in an analogous art discloses the above limitation. (Spear, Column 8, Lines 42-50, "[T]he items with the same rank may be ordered randomly or according to a predefined procedure (default or user-specified).").

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Spear into the teaching of Engelhart to randomly select a provider when at least two have an identical value. The modification would be obvious because one of ordinary skill in the art would want the benefit of achieving an efficient and easy method to identify which service provider to use for a requested service (Spear, Column 2, Lines 35-44).

Claim 29 is the device claim corresponding to the method claim 21 and is rejected under the same reason set forth in connection of the rejection of claim 21.

Claim 30 is the device claim corresponding to the method claims 23-24 and is rejected under the same reasons set forth in connection of the rejection of claims 23-24.

Claim 31 is the device claim corresponding to the method claim 22 and is rejected under the same reason set forth in connection of the rejection of claim 22.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Engelhart (US Patent Publication No. 2004/0203580 A1), in view of Spear et al (Spear) (US Patent No. 6,853,621 B1), and in further view of Allen et al (Allen) (US Patent Publication No. 2003/0182413 A1).

As per claim 19, neither Engelhart nor Spear specifically discloses:

- ***the portion of the plurality of service providers are notified of the most favorable value***, However, Allen in an analogous art discloses the above limitation. (Allen, Fig. 2, Pages 8-9, Paragraph [0178] and Page 11, Paragraphs [0227]-[0228]), Allen teaches that service providers are informed via a web site of the performance criteria of service providers and are able to discount their rates as a result.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Allen into the teaching of Engelhart to notify a portion of the service providers of the best value. The modification would be obvious because one of ordinary skill in the art would want to obtain the best price possible for the service being sought. By providing the best price to the service provider, this gives the provider the opportunity to lower their price in order to obtain the user's business (Allen, Page 11, Paragraph [0028]).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Engelhart (US Patent Publication No. 2004/0203580 A1), in view of Spear et al (Spear) (US Patent No. 6,853,621 B1), in view of Allen et al (Allen) (US Patent Publication No. 2003/0182413

A1), and in further view of Campbell et al (Campbell) (US Patent Publication No. 2002/0023033 A1).

As per claim 20, neither Engelhart nor Spear nor Allen specifically discloses:

- ***the portion of the plurality of service providers are informed if the most favorable value has been indicated by at least two of the plurality of service providers***, However, Campbell in an analogous art discloses the above limitation. (Campbell, Fig. 9, Pages 9-10, Paragraphs [0102]-[0105] and Fig. 8B, Page 11, Paragraph [0118], "The feedback may also provide some of the terms of one or more proposals, such as the next to best proposal. Such feedback enables the providers to gauge what the current market price level is for the particular item requiring funding."), Campbell teaches that terms of a plurality of service providers are disclosed to other service providers. Therefore it would be obvious to one of ordinary skill in the art that since multiple offers are disclosed, if the best value is indicated by more than one service provider then it is provided.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Campbell into the teaching of Engelhart and Allen to notify a portion of the service providers if the best value is indicated by more than one service provider. The modification would be obvious because one of ordinary skill in the art would want to provide service providers with the ability to gauge prices for a particular service and enable providers to be offer better or equal value in order to be competitive (Campbell, Page 11, Paragraph [0118]).

Conclusion

7. The prior art not relied upon but considered pertinent to applicant's disclosure is made of record and listed on form PTO-892.

Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §

706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANGELA T. CHAMBERS whose telephone number is 571-270-3168. The examiner can normally be reached Monday through Thursday, 9:00am-6:30pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro, can be reached at telephone number 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Patent Examiner, Art Unit 2617
October 16, 2008

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